



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,441	12/05/2001	Martin Garza	72165	9528

27975 7590 04/22/2004

ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A.  
1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE  
P.O. BOX 3791  
ORLANDO, FL 32802-3791

EXAMINER

KERVEROS, JAMES C

ART UNIT	PAPER NUMBER
----------	--------------

2133

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/005,441

Applicant(s)

GARZA ET AL.

Examiner

James C Kerveros

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2133

## **DETAILED ACTION**

### ***Claim Objections***

Claims 5, 6, 11 and 12 are objected to because of the following informalities:

Claims 5 and 11 and claims 6 and 12 include acronyms "DBDB.sub.HEX" and "DSX", respectively, and as such do not carry patentable weight.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Serikawa et al. (US 6028845), issued: February 22, 2000.

Regarding independent Claims 1 and 7, Serikawa discloses a communication-line-quality measuring system for use with a method, for reporting link performance measurements from a remote site (terminal equipment 12) to a query site (TDMA equipment 11), comprising:

In response to the remote site (measurement site, 12) detecting a prescribed digital code sequence (pattern generating means, 71), causing the remote site to select

Art Unit: 2133

a number of errors from the pattern, associated with the link performance parameters, FIGS. 10 and 11.

Transmitting a prescribed digital code sequence from the pattern generating means (71) in the test site (TDMA equipment 11) for providing a pseudo-random noise signal over the communication link (down-link line) to the measurement site (terminal equipment 12), as shown in Figs. 10 and 11.

Introducing a selected different numbers of errors associated with the link performance parameters from the measurement site (12) into the prescribed digital code sequence pattern generating means (71) via the loop-back means (50) over the communication link (up-link line) to the test site (11), in accordance with a prescribed relationship between the performance measurement data and the respectively different ranges of link performance parameters.

At the test site (11), processing the prescribed digital code sequence having a number of errors, as looped back over the communication link (up-link line), which is representative of the performance measurement data performed on the communication link by the measurement site (12). The pseudo-random noise signal (71) is transmitted from the TDMA equipment 11 to the terminal equipment 12 through the downlink line and looped back from the terminal equipment 12 to the TDMA equipment 11. The signal is then compared, through comparing part 73, with the reference pseudo-random noise signal, which is the same as the random pattern signal generated in the pattern generation part 71, and measures line quality of both the up-link line and downlink line. As a result of the comparison, for example when a value of the BER is

Art Unit: 2133

larger than the predetermined value, it is determined that the transmission line is in a poor condition, (Col.13, lines 10-20).

Regarding Claims 2 and 8, the looped back errors, from the measurement site (12) over the communication link (up-link line) to the test site (11) is based upon different ranges of the link performance measurements.

Regarding Claims 3, 9, comparing part 73, which includes multiple sets of performance thresholds respectively, such as the reference signal generated in the pattern generation part 71, associated with plural link parameters.

Regarding Claims 4 and 10, the plural link parameters include signal margin and attenuation, such as the line quality between the TDMA equipment 11 and the terminal equipment 12. In general an error is detected when the measured line quality is poor due to line quality degradation. Poor quality by definition effects the signal margin and attenuation due to, for example "when connection in the connectors of the coaxial cables as transmission lines is poor, outside noise may enter into the transmission lines. When a malfunction occurs, such as, for example, a sealing material of the coaxial cable breaking, outside noise likewise enter into the transmission lines", (col. 7, lines 7-13).

Regarding Claims 5 and 11, the prescribed digital code sequence, such as random pattern signal generated in the pattern generation part 71, is repeatedly provided to the terminal equipment 12 through the downlink line, which encompasses the digital code pattern  $DBDB_{HEX}$ .

Regarding Claims 6 and 12, the looped back errors, which are transmitted over the communication link (up-link line) from the measurement site 12 to the test site 11, are transmitted as a DSX digital signal stream.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James C Kerveros whose telephone number is (703) 305-1081. The examiner can normally be reached on 9:00 AM TO 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

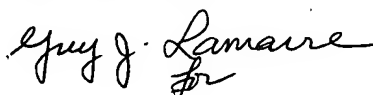
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

U.S. PATENT OFFICE  
Examiner's Fax: (703) 746-4461  
Email: [james.kerveros@uspto.gov](mailto:james.kerveros@uspto.gov)

Date: 15 April 2004  
Office Action: Non-Final Rejection

By: 

James C Kerveros  
Examiner  
Art Unit 2133

  
for

Albert DeCady  
Primary Examiner